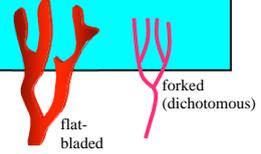


MACRO PLANT



Techniques needed and shape



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Phylloporaceae
delicate blistered fronds

*Descriptive name

Features

1. plants 10-40mm tall consist of *wiry*, branched stalks (stipes) and narrow, delicate red-brown or pink *blades*, often forked, about 30mm long
2. sporangial clusters (sori) are *blister-like*, produced and released leaving scars *successively* in bands across the blades upwards towards the blade tip

Occurrences

Usual Habitat

Special requirements

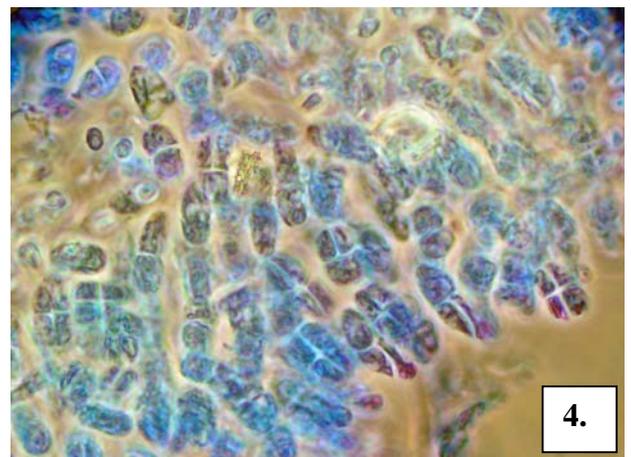
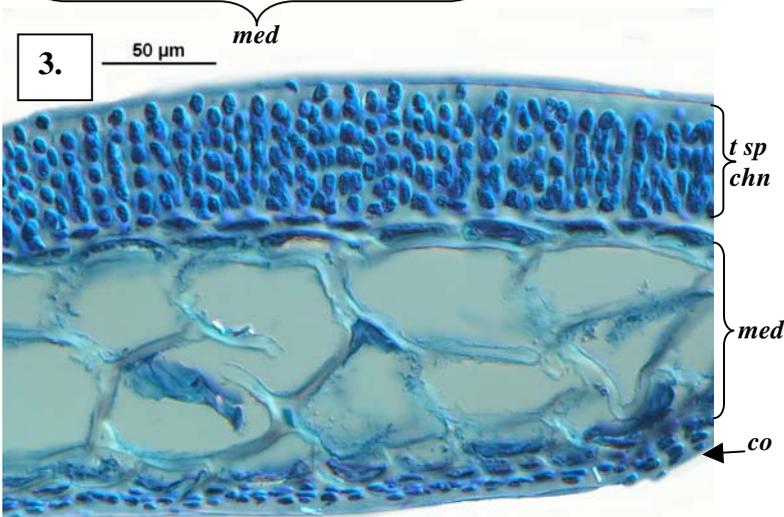
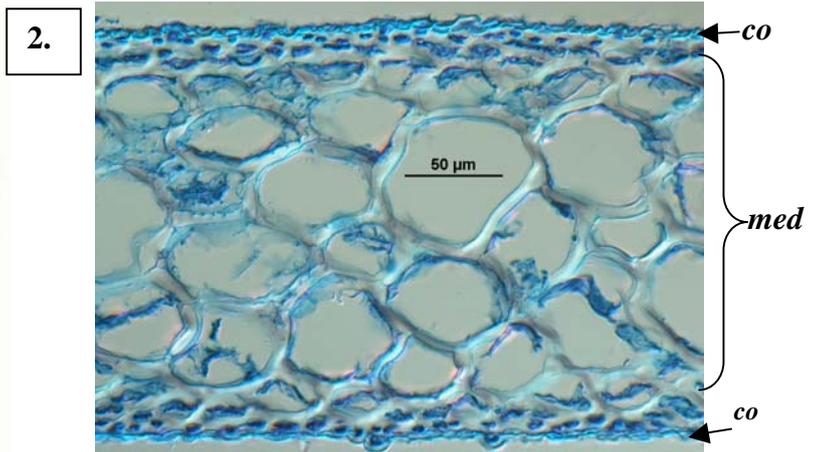
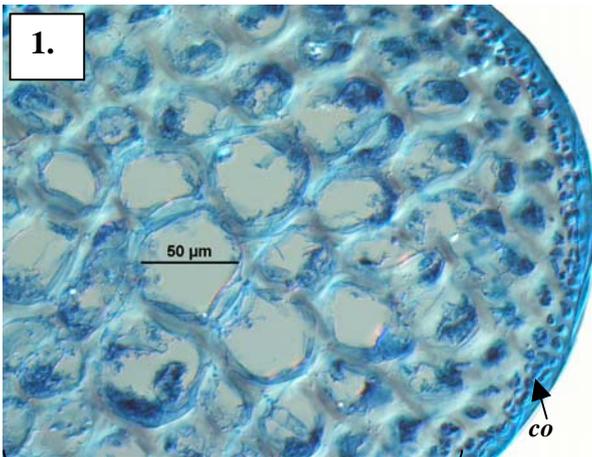
from the Mediterranean, Europe, Britain and S. Africa. In Australia, from N Spencer Gulf, S Australia, Victoria, SE Tasmania and Port Hacking, NSW
plants with *sponge* basally are often found under jetties in *shade* or on molluscs *at depth*

1. cut a cross section to find *large, closely* packed, equal-sided (parenchymatous) cells in the core (medulla) and outer (cortex) layers of several rows of *small* cells facing outwards
2. if possible, find sporangial plants with bands of raised "*blisters*". Cut a cross section to find *chains* of tetrasporangia, divided in a cross (*cruciate*) pattern when mature
if wiry fronds are not present the fronds superficially look like *Stenogramme*, but *Stenogramme* has *scattered* patches of tetrasporangial clusters (sori)

Similar Species

Description in the Benthic Flora Part IIIA, pages 262–264

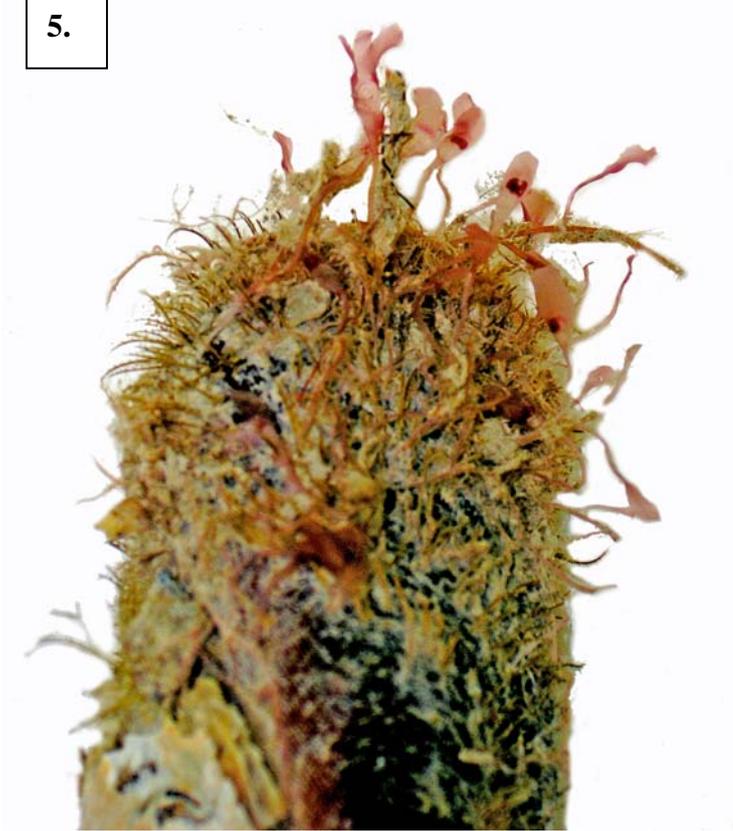
Details of Anatomy



Cross sections of *Schottera nicaeensis* stained blue and viewed microscopically

1. a stalk (stipe) with core (medulla, *med*) of equal-sided cells and outer layer (cortex, *co*) of small outwardly facing cells (A72653 slide 20588)
2. a blade (A72653 slide 20587)
3. a blade with a sporangial pustule (sorus) of tetrasporangial chains (*t sp chn*) (A72653 slide 20588)
4. extruded tetrasporangia some showing cross-shaped (cruciate) division (A60173 slide 11543)

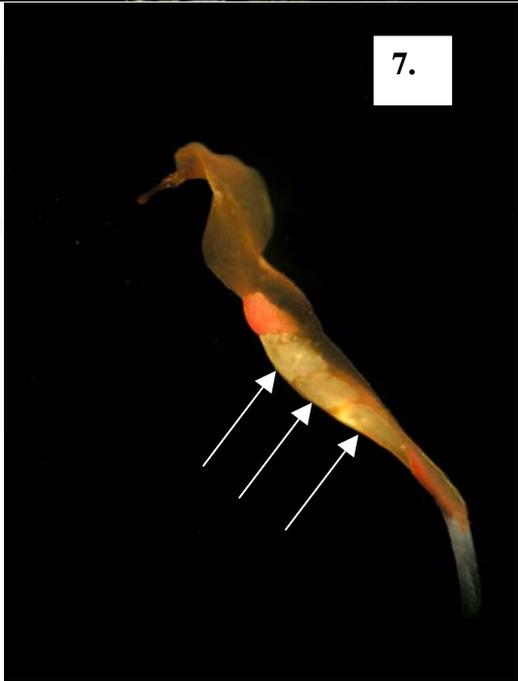
5.



6.



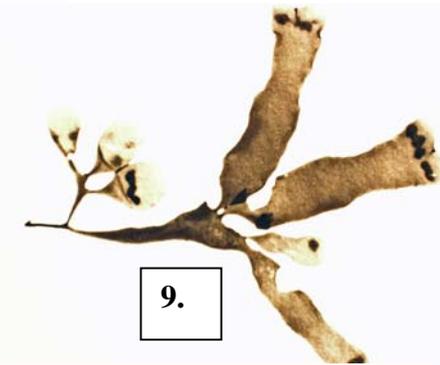
7.



8.



9.



10.



Specimens of *Schottera nicaeensis* (Lamouroux *ex* Duby) Guiry & Hollenberg
 5, 6, 7. enlargements of specimens growing between the hairs of the mussel, *Trichomya*, 24m deep at Stony Point, N of Whyalla, S Australia (A72635), showing the delicate blades, prominent red sporangial masses (sori) and pale scars of extruded sori (arrowed)
 8, 9. two magnifications of pressed specimens with more prominent stalks and proliferating blades found in late summer, 5-7m deep on mussels at Port Phillip Bay, Victoria (A39482)
 10. specimens with more forked blades and proliferations possibly a result of damage attached to floating seagrass (*Amphibolis*) Glenelg, S Australia (A61719)

* Descriptive names are inventions to aid identification, and are not commonly used
 Prepared September 2005, additions September 2009